



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,612	08/01/2006	Melvin G. Mitchell	3597/3US(formerly 3226/3)	3790
23638 7590 12/15/2008 ADAMS INTELLECTUAL PROPERTY LAW, P.A. Suite 2350 Charlotte Plaza 201 South College Street CHARLOTTE, NC 28244			EXAMINER HAWKINS, KARLA	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 12/15/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,612	Applicant(s) MITCHELL ET AL.	
	Examiner KARLA HAWKINS	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial Office action for application 10/597,612.
2. Claims 1-23 are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-11, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by STROUD, Jr. ET AL. (US 2004/0213956 A1).
5. With regard to claims 1, STROUD discloses a micro-perforated laminae having simultaneous liquid retention and gas venting capability (paragraph 17), comprising a layer of material defining a total structure area (fig. 1, films 15; paragraph 25, regarding the preferred film materials; paragraph 35, regarding a 48 gauge PET film laminated to a 7.5" * 5.25" CPET tray) and having plurality of spaced-apart perforations defining a total open orifice area (paragraph 17, regarding the perforations are spaced from each other), wherein the total open orifice comprises about 0.1% to 17% of the total surface area of the layer (paragraph 36).

Art Unit: 1797

6. With regard to claim 2, STROUD teaches a micro-perforated laminae according to claim 1, wherein the perforations comprise slits each having a length of no more than about 100 mils (paragraph 28).
7. With regard to claim 3, STROUD discloses a micro-perforated laminae according to claim 1, wherein the perforations comprise holes each having a diameter of no more than about five mils (paragraph 29).
8. With regard to claim 5, STROUD teaches A micro-perforated laminae according to claim 1, wherein the layer of material comprises at least one material selected from the group consisting of polypropylene, polyethylene, polyethylene terephthalate, nylon 6, nylon 66, polycarbonate, polyethylene terephthalate glycol, high impact polystyrene, polyacrylonitrile-butadiene-styrene, polyacrylate, polytetrafluoroethylene, polyvinyl fluoride, cellulose acetate, polyvinylchloride, chloride, polyvinylidene fluoride, polyvinylidenechloride, linear low density polyethylene and low density polyethylene (paragraph 25, regarding polypropylene)
9. With regard to claim 6, STROUD discloses a micro-perforated laminae according to claim 1, wherein the layer of material comprises at least one selected from the group consisting of a film, foil, web and sheet (paragraph 29, regarding the web).

10. With regard to claim 7, STROUD teaches a micro-perforated laminae according to claim 6, wherein the micro-perforated laminae has a weight of between 8 g/m² and 680 g/m² (paragraph 25, regarding the film).
11. With regard to claim 8, STROUD discloses a micro-perforated laminae according to claim 1, wherein the micro-perforated laminae simultaneously retains liquid and vents gas (paragraph 17).
12. With regard to claim 9, STROUD teaches a micro-perforated laminae according to claim 1, wherein the layer of material comprises one or more selected from the group consisting of a thermoplastic material, metal foil, cellulosic film, paper and nonwoven (paragraph 25, regarding polypropylene).
13. With regard to claim 10, STROUD discloses a micro-perforated laminae according to claim 1, wherein the micro-perforated laminae defines first and second sides (paragraph 27, regarding the heat sealable side compatible for direct food contact, and figure 1, the visible sides of films 15 that are not in direct food contact), and retains a predetermined level of water on the first side while allowing a predetermined level of liquid to pass through to the second side(example 1, paragraph 33, regarding leakage performance observations).
14. With regard to claim 11, STROUD teaches a micro-perforated laminae according to claim 10, wherein the micro-perforated laminae retains about 25-60 centimeters of static water head on the first side (paragraph 33, regarding one inch of static water head).

Art Unit: 1797

15. With regard to claim 22, STROUD discloses A method of making a micro-perforated laminae comprising the steps of providing a layer of material defining a total surface area (fig. 1; paragraph 25 regarding the preferred film materials; paragraph 35, regarding a 48 gauge PET film laminated to a 7.5" * 5.25" CPET tray), and micro-perforating the layer (paragraph 4) to form a plurality of spaced-apart perforations defining a total open orifice area (paragraph 17, regarding the perforations are spaced from each other), wherein the total open orifice area comprises about 0.1% to 17.0% of the total surface area of the layer (paragraph 36).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. Claims 4, 12-19 rejected under 35 U.S.C. 103(a) as being unpatentable over STROUD, Jr. ET AL. (US 2004/0213956 A1).

19. Referring to Claim 4, Stroud, Jr. et al. discloses the micro-perforated laminae of Claim 1, but Stroud, Jr. et al. does not disclose wherein the total open orifice area is in the range of about 0.1 mm² to about 17 mm² per square centimeter of the total surface area. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a total open orifice area in the range of about 0.1 mm² to about 17 mm² per square centimeter of the total surface area in order to supply the simultaneous liquid retention and gas/vapor venting characteristics desirable for a particular application, since where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

20. Referring to Claim 12, Stroud, Jr. et al. discloses the micro-perforated laminae of Claim 10, but Stroud, Jr. et al. does not disclose wherein the first and second sides have a contact angle of water in the range of about 36 to 42 degrees. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide first and second sides having a contact angle of water in the range of about 36 to 42 degrees in order to more effectively control the hydrophobicity of the first and second sides, since where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

21. Referring to Claim 13, Stroud, Jr. et al. discloses the micro-perforated laminae of Claim 1, wherein the layer of material is mechanically micro-perforated (para. [0025], regarding the preferred method of film perforation), and the perforations compose micro-slits having a length of about one millimeter each (para. [0028], regarding slits of smaller proportions) and are spaced-apart on the layer at a density per square area (para. [0036]). However, Stroud, Jr. et al. does not explicitly disclose the micro-slits spaced-apart on the layer at centers. However, it would have been obvious to one of ordinary skill in the art at the time of invention that mechanical perforation whereby slits or holes are cut through the film (para. [0025], regarding the preferred method of film perforation) would inherently permit the micro-slits to be spaced-apart on the layer at centers. Furthermore, Stroud, Jr. et al. does not disclose micro-slits which are spaced-apart on the layer at a density per square area ranging from 10 cm centers to 0.2 cm centers. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide micro-slits which are spaced-apart on the layer at a density per square area ranging from 10 cm centers to 0.2 cm centers in order to more effectively control the simultaneous liquid retention and gas/vapor venting characteristics for a particular application, since where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

22. Referring to Claim 14, Stroud, Jr. et al discloses the micro-perforated laminae of Claim 13, but Stroud, Jr. et al. does not explicitly disclose wherein the layer of material composes a diamond micro patten film. However, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a layer of material comprising a diamond micro pattern film in order to construct an article having a barrier film to prevent excessive leakage, since it was within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

23. Referring to Claim 15, Stroud, Jr. et al. discloses the micro-perforated laminae of Claim 14, wherein the film comprises polyethylene (para. [0025], regarding polyethylene). However, Stroud, Jr. et al, does not explicitly disclose wherein the film comprises linear low density polyethylene and low density polyethylene. However, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a film comprising linear low density polyethylene and low density polyethylene in order to construct an article having a barrier film to prevent excessive leakage, since it was within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

25. Referring to Claims 16 and 23, Stroud, Jr. et al. discloses the micro-perforated laminae of Claim 1, wherein the layer of material is mechanically

micro-perforated (para. [0025], regarding the preferred method of film perforation), and the perforations compose micro-slits having a length of about one millimeter each (para. [0028], regarding slits of smaller proportions) and are spaced-apart on the thermoplastic layer (para. [0025], regarding polypropylene) at a density per square area (para. [0036]). However, Stroud, Jr. et al. does not explicitly disclose the micro-slits spaced-apart on the layer at centers. However, it would have been obvious to one of ordinary skill in the art at the time of invention that mechanical perforation whereby slits or holes are cut through the film (para. [0025], regarding the preferred method of film perforation) would inherently permit the micro-slits to be spaced-apart on the layer at centers. Furthermore, Stroud, Jr. et al. does not disclose micro-slits which are spaced-apart on the thermoplastic layer at a density per square area of 0.2 cm centers. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide micro-slits which are spaced-apart on the thermoplastic layer at a density per square area of 0.2 cm centers in order to control the simultaneous liquid retention and gas/vapor venting characteristics for a particular application, since where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

26. Referring to Claim 17, Stroud, Jr. et al. discloses the micro-perforated laminae of Claim 16, wherein the layer of material composes polyethylene (para. [0025],

Art Unit: 1797

regarding polyethylene). Stroud, Jr. et al. does not explicitly disclose wherein the layer of material comprises low density polyethylene. However, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a layer of material comprising low density polyethylene in order to construct an article having a barrier film to prevent excessive leakage, since it is within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

24.27. Referring to claim 23, STROUD discloses a micro-perforated laminae having simultaneous liquid retention and gas venting capability (paragraph 17), comprising a layer of material defining a total structure area (fig. 1, films 15; paragraph 25, regarding the preferred film materials; paragraph 35, regarding a 48 gauge PET film laminated to a 7.5" * 5.25" CPET tray) and having plurality of spaced-apart perforations defining a total open orifice area (paragraph 17, regarding the perforations are spaced from each other), wherein the total open orifice comprises about 0.1% to 17% of the total surface area of the layer (paragraph 36).

27 Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **STROUD, Jr. ET AL. (US 2004/0213956 A1)** in view of **CURRO ET AL (US 2000/37249A1)**.

Art Unit: 1797

28. Referring to Claim 18, **STROUD** discloses the micro-perforated laminae of Claim 17, wherein the micro-perforated laminae define first and second sides (para. [0027], regarding the heat sealable side compatible for direct food contact, and fig. 1, the visible sides of films 15 that are not in direct food contact). Stroud, Jr. et al. does not disclose that the second side has a silicone release coating.

29. **CURRO** however, teaches a second side having a silicone release coating (Page 10, lines. 15-21).

30. Therefore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of invention to modify the invention of Stroud, Jr. et al. with a second side having a silicone release coating as taught by **CURRO** for the purpose of increasing the hydrophobicity of the second side.

31. Claims 20 and 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over **STROUD, Jr. ET AL. (US 2004/0213956 A1)** in view of **ROSS ET AL. (US 2003/0098135 A1)**.

32. Referring to Claim 20, **STROUD** discloses the micro-perforated laminae of Claim 17, wherein the micro-perforated laminae define first and second sides (para. [0027], regarding the heat sealable side compatible for direct food contact, and fig. 1, the visible sides of films 15 that are not in direct food contact). Stroud, Jr. et al. does not disclose that the second side has a silicone release coating.

Art Unit: 1797

33. **ROSS** however, teaches a multilayered web including a top surface layer with a top surface layer including first and second fibers, wherein the first fibers are hydrophilic and the second fibers are hydrophobic (ab.)

34. Therefore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of invention to modify the invention of Stroud, Jr. et al. with a two layers as taught by **ROSS** for the purpose of reducing waste by allowing the utilization of substantially the entire absorbency capacity.

35. With regard to claim 21, ROSS discloses the fiber demonstrating a surface energy of about 10-50 dynes/cm.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARLA HAWKINS whose telephone number is (571) 270-5562. The examiner can normally be reached on Monday-Thursday 7:30- 5, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duane S. Smith/
Supervisory Patent Examiner, Art Unit 1797

Karla Hawkins
Examiner
Art Unit 1797